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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/558,094

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Sangheon Yoon

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EXAMINER

OSTERHOUT, BENJAMIN LEE

ART UNIT

PAPER NUMBER

1792

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/558,094	Applicant(s) YOON ET AL.	
	Examiner BENJAMIN OSTERHOUT	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>20090112, 20060623, 20060209</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

1. All the information disclosure statement (IDS) submitted thus far and the references therein have been considered. However, the IDS submitted on February 2006 has a line struck through reference EP 0925754, due to this reference being submitted on another IDS. This reference has been considered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 10 recites the limitation "the disposer" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 6-9, 14-15, 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,900,070 to Jarvis et al.

7. Jarvis et al. teaches a dishwasher (col. 1, ll. 7-10) comprising a sump housing (Fig. 2, part 18); a tub (Fig. 1, part 12); a wash arm assembly (Fig. 1, part 21); a heater assembly fastened to an inside of the sump housing (Fig. 2, part 22); and a pump assembly fastened to the sump housing (Fig. 2, part 20; col. 2, ll. 44-53). Jarvis et al. further teaches that the water is pumped to the heated wash water over the dishes (col. 4, ll. 59-61) which are placed above the heater. Jarvis et al. also teaches that the dishwasher has a wash impeller in the sump housing (Fig. 2, part 38); a motor under the sump housing (Fig. 2, part 24); and an output shaft passed through a bottom of the sump housing (Fig. 2, part 26). Jarvis et al. also teaches that the heater is removable from the sump housing from outside of the sump housing and provided to a bottom of the sump housing (Fig. 2, part 22). Jarvis et al. also teaches that the sump housing has an opening in a side for the heater assembly to pass through (Fig. 2, see where part 22 connects to housing) and the heater assembly does not interfere with components in the sump housing when inserted or removed (Fig. 2, part 22).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 4-5, 10, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,900,070 to Jarvis et al. in view of U.S. Patent No. 5,377,707 to Young.

11. Regarding claims 4-5, and 16, Jarvis et al. is relied upon as above in paragraph 7 of this action. Jarvis et al. does not teach that the dishwasher has a disposer rotatably mounted in the sump housing between the impeller and the bottom of the sump housing wherein the impeller and disposer are driven by the same motor for smashing soil contained in the washing water.

12. Young teaches a dishwasher (col. 1, ll. 6-8) wherein a macerator assembly (Fig. 7, part 150; col. 4, ll. 61-65) is positioned between the recirculation impeller (Fig. 3, part 128) and the bottom of the sump housing (lower pump housing, Fig. 7, part 56; see also Fig. 4, part 128 for reference of placement of parts) wherein the recirculation impeller and macerator are driven by the same motor and drive shaft (Fig. 3, part 148) in order to chop up pieces of soil entrained in the sump wash water (col. 13, ll. 49-52).

13. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the dishwasher of Jarvis et al. with the macerator assembly of Young in order to chop pieces of entrained soil in the sump wash water.

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14. Regarding claim 10, Jarvis et al. is relied upon as above in paragraph 7 of this action. Claim 10 lacks sufficient antecedent bases for "the disposer". Claim 10 is dependent upon claim 9, however for the advance of prosecution claim 10 will be considered to be no longer lacking the antecedent basis and the obvious analysis in paragraphs 11 and 12 of this action will be relied upon.

15. Jarvis et al. teaches a heater that does not interfere with the internal components of the dishwasher (Fig. 2, part 22), therefore Jarvis et al. when modified with the macerator assembly of Young which will rest between internal components of the dishwasher pump/sump assembly, will continue not to interfere with the internal components of the dishwasher even when separated from the assembly.

16. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,900,070 to Jarvis et al. in view of U.S. Patent No. 5,377,707 to Young in view of U.S. Patent No. 5,299,586 to Jordan et al.

17. Regarding claims 11-13, Jarvis et al. in view of Young are relied upon as above in claim 10. Jarvis et al. teaches that the heater passes through an opening for heating the washing water (Jarvis et al., Fig. 2, part 22). Jarvis et al. in view of Young does not teach a packing inserted in the opening for sealing the opening, a clamp fastened to the sump housing for holding the heater, and that the heater assembly includes a pressing mechanism for pressing down to deform the packing to seal the opening.

18. Jordan et al. teaches a dishwasher (col. 1, ll. 10-11) wherein a tub is sealed from a circular heater coil (Fig. 5, part 88) with gaskets (not shown), a pair of insulating holding brackets are connected to the sump (Fig. 4 and 5, parts 92), and the top of the

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heater coil along with the fittings press down on the seal (Fig. 7, part 90) thereby sealing the opening/fitting in order to prevent the heater coil from being too close to the plastic material of the tub and deforming said plastic material (col. 4, ll. 46-64).

19. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the heater assembly of Jarvis et al. in view of Young with the gaskets, brackets, and fittings of Jordan et al. in order to prevent the heater coil from being too close to the plastic material of the tub and deforming said plastic material.

Conclusion

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN OSTERHOUT whose telephone number is (571)270-7379. The examiner can normally be reached on Monday-Thursday 8:30am-3:30pm.

21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

22. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph L. Perrin/
Joseph L. Perrin, Ph.D.
Primary Examiner
Art Unit 1792

/BLO/

Benjamin L. Osterhout
24 March 2009